U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2006-046-EA

CASEFILE/PROJECT NUMBER: COC 58705 and ROW COC68238

PROJECT NAME: 4 APD's; Weaver Ridge Wells - 23-14, 23-9, 23-10, 27-1

LEGAL DESCRIPTION: T. 1S, R. 104W, sec. 23, 27

APPLICANT: Robert L. Bayless, Producer LLC

ISSUES AND CONCERNS: No pipeline routes submitted with APD's. Pipelines will be submitted separately by Canyon Gas.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: Weaver Ridge well 23-9, the proposed access disturbance will be 50' X 189' (0.22 acres) and the well pad will disturb 300' X 175' (1.21 acres). Total disturbed surface would be xxx acres.

Weaver Ridge well 23-14, there will be no proposed access because access will be from an existing road. The well pad will disturb 300' X 175' (1.21 acres). Total disturbed surface would be 1.21 acres.

Weaver Ridge well 23-10, the proposed access disturbance will be upgrading an exiting two-track for approximately 50' X 1580' (1.81 acres) and the well pad will disturb 300' X 175' (1.21 acres). Total disturbed surface would be 3.02 acres.

Weaver Ridge well 27-1, the proposed access will be approximately 1654' X 50' (1.90 acres) the well pad will disturb 300' X 175' (1.21 acres). Total disturbed surface would be 3.11 acres.

Well Name	New Access Road	Location size	Acres Disturbed (Total)
Weaver Ridge 23-14	None	300' X 175'	1.21
Weaver Ridge 23-9	50' X 189'	300' X 175'	1.43
Weaver Ridge 23-10	50' X 1580'	300' X 175'	3.02
Weaver Ridge 27-1	50' X 1654'	350' X 260'	3.11
		Total	**8.77**

Total disturbance for this project will be 8.77 acres.

Applicant proposes to construct new well access roads. The borrow ditches will be backsloped 3:1 or shallower and maximum grades will be 2% for 500'. No major road cuts are necessary and surfacing material will consist of native material from the road crown. The topsoil will be windrowed during construction and placed in the borrow ditch backslope upon road completion. During reclamation, the backslope of the borrow ditch will be revegetated.

Applicant also proposes to construct new well locations. Site preparation for production will be done with standard excavation equipment using native materials. Additional surface material will be obtained from a commercial source or an approved borrow area. Production facilities may vary according to actual reservoir discovered and will be engineered upon completion of well tests. If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 11/2 times the storage capacity of the largest tank. All loading lines and valves will be placed inside the berm surrounding the tank battery. The color Juniper Green was specified on the onsite to paint the above ground permanent structures. Any necessary pits will be fenced on all sides to prevent any wildlife and livestock entry and any production pit will be netted bird tight.

Waste will be contained in a portable trash cage which will be totally enclosed with small mesh wire. The cage and its contents will be transported to and dumped at a Colorado Department of Public Health and Environment (CDPHE) approved sanitary landfill. Flammable waste will be disposed of by hauling to an appropriate disposal site. Drilling fluid in pit will be allowed to evaporate then the drill cuttings and pit will be buried. Produced fluids other than water will be contained in storage tanks during completion and testing. Sewage disposal facilities will be provided and will not be buried on location or put into a borehole.

Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring all cut and fill slopes and distributing the stock piled topsoil back over the disturbed area. The site will be revegetated using a certified seed mix as prescribed by the BLM. Seed tags will be submitted to the Area Manager within 30 days of seeding. If necessary, a BLM certified weed applicator will be used for weed control.

ROW Application: Bayless proposes to build a new road for the Colorado portion of an access road to the proposed Weaver Ridge #25-3 well. The well will be located in Utah with access to the location from the existing Bayless Weaver Ridge #27-16 well, which was approved by White River Field Office in June 2005. To reach the Utah state line, the road will be1,325 feet in length, a maximum 30 feet wide, and create a maximum 0.91 acres of disturbance. The ROW approval for the remaining 418 feet of access road to well 25-3 is located in Utah and will be applied for separately with the Vernal District of the BLM. The project is slated to start March 1, 2006 and construction will take less than 1 week. All of the equipment needed for construction of this access road will already be located on the well site. No water crossings will be needed. No fence lines will be crossed. A term of 30 years is requested for this right of way.

No Action Alternative: In the no-action alternative the wells and access roads would not be permitted; therefore there would not be any new disturbance.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: An alternative to the access road to the Utah Weaver Ridge well 25-3 well was considered. An access road route slightly to the west of the requested access was originally staked**.** The 1,146 ft route was examined with a BLM representative during an onsite inspection. This route was rejected due to possible disturbance of habitat for an endangered plant species. The proposed route bypasses and will not disturb the habitat for the endangered plant.

NEED FOR THE ACTION: To respond to the request by applicant to exercise lease rights and develop hydrocarbon reserves.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-5

Decision Language: "Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The entire White River Resource area has been classified as either attainment or unclassified for all pollutants, and most of the area has been designated prevention of significant deterioration (PSD) class II. The proposed action is not located within a twenty mile radius of any special designation air sheds or non-attainment areas. The Dinosaur National Monument visitor's center is located approximately 21 miles northeast of the project area. Dinosaur National Monument is a PSD class II airshed with special designations relating to

visibility. Overall, the proposed actions alone should not greatly compromise National Ambient Air Quality Standards (NAAQS) on an hourly or daily basis.

Environmental Consequences of the Proposed Action: Exhaust produced from production facilities and heavy equipment associated with the proposed actions combined with the increasing number of fluid mining activities in northwestern Colorado will have cumulative impacts to local air quality. However, following completion of the proposed actions, air quality should return to near pre-construction levels in this location. During dry and windy periods, air quality may be compromised due to increased levels of fugitive particulate matter which is defined as fugitive emissions of particulate matter that are the direct or proximate result of man's activities (e.g. materials left by man exposed to the wind or later acted upon by another force as the wind or automobile traffic, or particulate matter being thrown into the atmosphere by the operation of a heavy equipment). However, construction operations should not greatly compromise National Ambient Air Quality Standards (NAAQS) for particulate mater which calls for a maximum 24-hour average to be less than or equal to 150 $\mu g/m^3$. In addition, following successful reclamation, particulate mater is also likely to return to pre-construction levels.

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator will be responsible for complying with all local, state, and federal air quality regulations as well as providing documentation to the BLM that they have done so. To minimize production of fugitive particulate matter, vehicle speeds must not exceed 15 mph *or* dust plume must not be visible at appropriate designated speeds for road design. In addition, the application of a BLM approved dust suppressant (e.g. water or chemical stabilization methods) will be required during dry periods when dust plumes are visible at speeds less than or equal to 15 mph. Surfacing the roadway with gravels will also help mitigate production of fugitive particulate matter.

To reduce production of fugitive particulate matter originating from well pads and associated stockpiled soils (long term storage) interim reclamation will be required. Interim reclamation will consist of excess stockpiled soils associated with pad construction being pulled back over the portion of the well pad not being utilized for production facilities and access. Portions of the well pad undergoing interim reclamation will be returned to grade (as close as possible), promptly re-seeded, and biodegradable fabrics will be utilize on slopes exceeding 5% (e.g. fill slopes).

If interim reclamation is not practical (e.g. completion of drilling operation will require an extended period time [multiple well pads]), stockpiled topsoil will be covered with biodegradable fabrics such as (but not limited to) jute netting and seeded with BLM seed mixture recommended in the Vegetation section. Furthermore, soils stockpiled for short durations (e.g. during road/pipeline construction/maintenance) will be wetted during dry periods to reduce production of fugitive particulate matter.

CULTURAL RESOURCES

Affected Environment: Weaver Ridge well 23-14: the proposed well pad location has been inventoried at the Class III (100% pedestrian) level (Conner and Davenport 2006, Compliance Dated 1/24/2006) with no cultural resources identified in the well pad area.

Weaver Ridge well 23-9: the proposed well pad location has been inventoried at the Class III (100% pedestrian) level (Conner and Davenport 2006, Compliance Dated 1/24/2006) with no cultural resources identified in the well pad area.

Weaver Ridge well 23-10: the proposed well pad and access road have been inventoried at the Class III (100% pedestrian) level with two new isolated finds identified in the access road route.

Weaver Ridge well 27-1: The proposed well pad Location and access road route have been inventoried at the Class III (100% pedestrian) level (Conner and Davenport 2006, Compliance Dated 1/24/2006) with no new cultural resources identified in the access road or well pad inventory areas.

ROW Application: Bayless proposes to build a new road for the Colorado portion of an access road to the proposed Weaver Ridge 25-3 well. Two alternate access routes have been inventoried for the access road. One route, the southeastern one, appears to pass through the location of a previously recorded site (5RB 778). A reevaluation of the site location failed to identify more than two artifacts as the surface manifestation of the site.

Environmental Consequences of the Proposed Action: Weaver Ridge well 23-14: construction of the proposed well pad will not impact any known cultural resources.

Weaver Ridge well 23-9: construction of the proposed well pad will not impact any known cultural resources.

Weaver Ridge well 23-10 and access route: the proposed access route has the potential to impact and destroy two isolated finds. Due to the limited nature of the isolated finds the important archaeological data has largely been recovered during recordation. The destruction of the isolated finds represents a net loss to the regional data base but, the loss is not considered significant.

Weaver Ridge well 27-1and access: the proposed well pad and access road will not impact any known cultural resources.

ROW Application: If the southeastern access route alternative is selected for the access road there is a potential to impact previously undetected cultural resources on site 5RB 778. Even though there very limited surface manifestations left of the site and the soils are shallow there is always a limited chance that subsurface remains may be present that could be exposed or impacted during road construction. The losses to the regional database if subsurface remains are present at the site are hard to assess at this time. There would be no potential impacts to cultural resources of the northwestern access route is constructed.

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: Weaver Ridge wells 23-14, 23-9 and 23-10, access roads and Weaver Ridge 27-1 well: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

For the southeastern access route for the ROW into Utah the following additional mitigation would apply:

3. A monitor shall be present during initial surface grading to identify any previously undiscovered subsurface features on the site.

INVASIVE, NON-NATIVE SPECIES/RECLAMATION: (This includes vegetation information related to Public Land Health Standard 3.)

Affected Environment: The proposed project is within the pinyon/juniper woodland and hillside bunchgrass vegetation associations. The juniper woodland soils in this area are shallow and shale derived. The hillside bunchgrass communities associated with the 23-9 well has been

burned by wildfire in the recent past and contains a strong grass component primarily Indian ricegrass. Past reclamation efforts have included non-native species, which have performed well in soil stabilization.

The two noxious weeds found in this area are halogeton and cheatgrass. Both of these species are found throughout the area. Halogeton has the ability to rapidly colonize disturbed areas, but is easily controlled by successful revegetation. Cheatgrass is found throughout the area in all of the plant communities. This specie can hinder reclamation because of its highly competitive nature. Non-native species have been shown to out-compete cheatgrass. Noxious weeds, such as knapweeds, transported on site by construction equipment and support vehicles would also be of concern.

Impact of Proposed Action: Using the proposed non-native seed mix would adequately stabilize soils. These species have not been shown to move off site or to interbreed with adjacent plant species.

With prompt control of any noxious weeds that occur on the project area there would not be any adverse impacts to the adjacent plant communities. Prompt reclamation would prevent cheatgrass and halogeton from establishing.

*Impact of No Action Alternative***:** There would be no impacts.

Mitigation: In accordance with Condition of Approval (COA) #179 from Appendix B of the White River ROD/RMP, application of herbicides must be under field supervision of an Environmental Protection Agency (EPA) certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

MIGRATORY BIRDS

Affected Environment: The proposed locations are generally situated in open-canopied pinyon-juniper woodlands with minor inclusions of black and Wyoming big sagebrush. These woodlands are mature, but stunted, and support a sparse (<10%) subcanopy of mountain mahogany and ephedra with sparse herbaceous ground cover development (i.e., platey shales). The 23-10 and 23-9 locations lie immediately adjacent to public roads and the 23-14 location is located in close proximity to a producing well. Both the 23-14 and 27-1 locations are accessed by dedicated well access roads that have gating requirements attached to previous development. These gates are intended to limit road use to well development or maintenance activity throughout the year.

These habitats support a typical complement of mid-elevation woodland birds (e.g., black-throated gray warbler, gray flycatcher), but these more simply structured woodlands characteristically support a relatively low-density woodland bird community composed of few cavity dwellers and high conservation interest species and dominated by more generalized woodland associates (e.g., blue-gray gnatcatcher, chipping sparrow).

Environmental Consequences of the Proposed Action: Construction and drilling/ completion activities associated with these pads are scheduled to commence in May 2006 and be completed by September. Based on this schedule, development activity would take place synchronous with the migratory bird breeding season. Habitats affected by the four locations do not support high nest densities, particularly those birds of higher conservation interest, largely because of poorly developed woodland structure and ground cover and, in 3 cases, close proximity to existing forms of disturbance. Assuming proposed gas development activity was to take place during the core nesting season, it is likely that the breeding activities of no more than 4 pair of higher interest species would be directly or indirectly influenced. Due to the low potential for adversely affecting migratory bird nesting activity, the application of timing limitations is not considered warranted.

BLM has become aware of a number of recent incidents where migratory waterfowl (i.e., teal and gadwall) have contacted fluids stored in reserve pits during or after completion operations and are suffering mortality in violation of the Migratory Bird Treaty Act. The extent and nature of the problem is not well defined, but is being actively investigated by the federal agencies and the companies. Until the vectors of mortality are better understood, management measures must be conservative and relegated to preventing bird contact with pit contents that may be hazardous to migratory birds.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to disrupt the breeding activities of migratory birds or expose birds to fluids that pose a mortality risk.

Mitigation: The operator shall prevent use by migratory birds of reserve pits that store or are expected to store fluids which may pose a risk to such birds (e.g., migratory waterfowl, shorebirds, wading birds and raptors) during completion and after completion activities have ceased. Methods may include netting, the use of bird-balls, or other alternative methods that effectively prevent use and that meet BLM approval. It will be the responsibility of the operator to notify the BLM of the method that will be used to prevent use two weeks prior to when completion activities are expected to begin. The BLM approved method will be applied within 24 hours after completion activities have begun. All lethal and non-lethal events that involve migratory birds will be reported to the Petroleum Engineer Technician immediately.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no animals listed under the Endangered Species Act or included on BLM's sensitive species list that inhabit or derive important benefit from the area potentially influenced by the proposed action.

Environmental Consequences of the Proposed Action: The proposed action would have no conceivable affect on animals listed, proposed, candidate, or petitioned for listing under the Endangered Species Act. Similarly, there are no animals considered sensitive by BLM that would be potentially influenced by this action.

Environmental Consequences of the No Action Alternative: Same as the proposed action.

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed and no-action alternative would have no effective influence on special status species or associated habitat and would, therefore, have no potential to influence the status of applicable land health standards.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The applicant shall be required to collect and properly dispose of any solid waste generated by the proposed actions.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: All of the proposed well pads are situated within the Weaver Canyon catchment area. The proposed access road to the Utah location is situated in the headwaters of the Hells Hole watershed. All of the proposed surface disturbing activities are located in water quality stream segment 22 of the White River Basin. Both Weaver Canyon and Hells Hole are ephemeral tributaries to the White River in Utah which is a tributary to the Green River (tributary to the Colorado). A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list, the White River Resource Area RMP, and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. It should be noted that the White River from Douglas Creek to the Utah state line has been listed on the states monitoring and evaluation list (M&E list) for sediment impairments. All surface disturbing activities in the Hells Hole and Weaver Canyon catchment areas will directly

influence sedimentation rates to the White River, Green River, and eventually the Colorado River.

The State has classified stream segment 22 as "Use Protected". Stream segment 22 has been further designated by the state as being beneficial for the following uses: Warm Aquatic Life 2, Recreation 1b, and Agriculture. The antidegredation review requirements in the Antidegredation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For stream segment 22, minimum standards for four parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 325/100 ml, and 205/100 ml E. coli.

Ground Water: Surface geology to the south of Weaver Canyon is the Parachute Creek Member of the Green River Formation (Tertiary) while surface geology on the north side of Weaver Canyon is of the Lower Green River Formation (Tertiary). The Parachute Creek Member is comprised of interbedded siltstone, oil shale and marlstone. Perched aquifers may exist in fractured marlstone and oil shale layers which may overlie less permeable siltstone layers. No know springs or water wells are located within 1 mile of the proposed actions.

Environmental Consequences of the Proposed Action: Surface Water: Further use of existing access roads, construction of new access roads, and construction of well pads will increased soil exposure to erosional processes. Heavy equipment use will destroy any existing vegetation and increase compaction. Increased compaction combined with reduced vegetation will further decrease infiltration rates and elevate erosive potential due to runoff (overland flows) and raindrop impact during storm events. Given the low permeability rates of the affected soils, leaks or spills of environmentally unfriendly substances are likely to be carried down gradient as runoff and could potentially deteriorate surface water quality. In addition, well pad #23-9 located in the headwaters of Weaver Canyon is situated in close proximity to the main channel and an ephemeral tributary to Weaver Canyon. Any fill or stockpiled soils not properly stabilized may directly discharge sediment to the system further deteriorating water quality during periods of flow (runoff and precipitation events).

Ground Water: In the event of any leaks or spills, local ground water may be adversely impacted as contaminates percolating through soils may contact joints or fractures responsible for recharging perched aquifers.

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator will be responsible for complying with all local, state, and federal water quality regulations (such as but not limited to Phase I Storm Water Permit, 404 permits (if applicable), and Industrial Wastewater/Produced Water Permits). The operator will also be required to provide the BLM with documentation that all required permits were obtained.

Surface Water: All surface disturbing activities will strictly adhere to “Gold Book” surface operating standards for oil and gas exploration and development (copies of the “Gold Book” can be obtained at the WRFO). Corrugated metal pipes (CMPs) are not recommended on slopes less than 10% and will NOT be used as drainage relief structures for stream crossings/gullies or to

drain inside drain ditches on slopes less than 3%. Based on the nature of the affected soils, drain dips will be utilized in place of CMPs in these locations. Energy dissipaters such as large gravels/small cobbles will be used at culvert and drainage dip outlets to minimize additional erosion. To mitigate water being channelized down roadways, all activity must stop when soils or road surfaces become saturated to a depth of three inches. Mud blading will be prohibited in attempts to reduce further soil displacement. Furthermore, following abandonment of the well pad all disturbed surfaces will be recontoured to the original grade promptly covered with a sufficient amount of woody debris (if available) and seeded with the appropriate seed mixture as outlined in the vegetation section of this document.

To mitigate surface erosion at well pads, interim reclamation will be required as outlined in the Air Quality mitigation sections above. In addition, silt fences will be utilized on all slopes exceeding 5 % (e.g. cut and fill slopes). Furthermore, special care must be given to pad 23-9 to prevent erosion of stockpiled soils/fill material from entering the affected drainages. Silt fences, proper seeding, and the used of bio-degradable fabrics are recommended to mitigate potential 404 violations.

Ground Water: Shallow aquifers shall be protected from hydrofracturing and the production of oil and gas by installation and cementing of surface and intermediate casing. Any groundwater produced from the Fort Union or Mesaverde Formations will be hauled off and disposed of due to poor water quality and therefore preventing adverse impacts to valuable surface and ground water resources. Environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of spill-guards (or equivalent spill prevention equipment) under and around pumping equipment is suggested to intercept such contaminants prior to contacting soils. Furthermore, to protect potential shallow ground water all pits shall be lined and all wastes associated with construction and drilling will be properly treated and disposed of as outlined in the proposed actions.

Finding on the Public Land Health Standard for water quality: Stream segment 22 is currently listed as meeting water quality standards. Stinking Water Creek is a tributary to the White River (Segment 21) which is listed on the states M&E list for sediment impairment, any increase in sedimentation to Stinking Water Creek will directly impact segment 21 of the White River. However, with suggested mitigation, water quality within the Stinking Water Creek catchment area will remain unchanged and no deterioration of water quality down stream is anticipated as a result of the proposed actions.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: There are no wetlands or riparian communities potentially influenced by the proposed action. The nearest perennial water source is the White River which is located approximately 6 miles to the northwest of the proposed project area.

Environmental Consequences of the Proposed Action: Riparian and wetland communities would not be directly or indirectly affected by well construction.

Environmental Consequences of the No Action Alternative: There would be no immediate action authorized that would have potential to affect wetland or riparian communities.

Mitigation: None

Finding on the Public Land Health Standard for riparian systems: Because there are no riparian or wetland resources potentially influenced by the proposed or the no-action alternative, a land health standard finding is not relevant. As such, there would be no change in the land health status of downstream riparian and wetland communities.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACEC's, flood plains, prime and unique farmlands, Wilderness, or Wild and Scenic Rivers, threatened, endangered or sensitive plants exist within the area affected by the proposed action. For threatened, endangered and sensitive plant species Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The following data is a product of an order III soil survey conducted by the Natural Resources Conservation Service (NRCS) in Rio Blanco County, CO. The following table highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office. CSU-1 "fragile soils" have been mapped at several of the proposed locations. Observation of a topographic map at all of the locations revealed that only the proposed access road to the Utah well site will impact soils on slopes greater than 35%. However, due to the slight erosive potential of soil unit 78 (see table below) and the limited drainage area above the affected area controlled surface use stipulations will not apply.

Soil Number	Soil Name	Acres w/in 30m radius	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
36	Glendive fine sandy loam	0.38	2-4%	Foothills Swale	2-4	Slow	Slight	>60

Soil Number	Soil Name	Acres w/in 30m radius	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
73	Rentsac channery loam	13.7	5-50%	Pinyon-Juniper woodlands	<2	Rapid	Moderate to very high	10-20
78	Rock Outcrop	3.03	50-100%	None		Very high	Slight	0

36-Glendive fine sandy loam (2-4 percent slopes) is a deep, well drained soil located along drainages on alluvial valley floors. It formed in alluvium. Elevation is 5,800 to 7,200 feet. The average annual precipitation is 14 to 17 inches, the average annual air temperature is 42 to 45 degrees F, and the average frost-free period is 80 to 105 days. Typically, the surface layer is pale brown fine sandy loam 6 inches thick. The underlying material to a depth of 60 inches or more is very pale brown, stratified fine sandy loam that has thin lenses of loamy fine sand to sandy clay loam. The soil is calcareous throughout. In some areas the surface layer is channery fine sandy loam. Permeability of this Glendive soil is moderately rapid. Available water capacity is moderate. Effective rooting depth is 60 inches or more. Runoff is slow, and the hazard of water erosion is slight. The soil is subject to rare periods of flooding.

73-Rentsac channery loam (5 to 50 percent slopes) is a shallow, well drained soil located on ridges, foothills, and side slopes. It formed in residuum derived dominantly from calcareous sandstone. The native vegetation is mainly pinyon, juniper, brush, and grasses. Elevation is 6,000 to 7,600 feet. The average annual precipitation is 14 to 18 inches, the average annual air temperature is 42 to 45 degrees F, and the average frost-free period is 80 to 105 days. Typically, the surface layer is grayish brown channery loam about 5 inches thick. The next layer is very channery loam about 4 inches thick. The underlying material is extremely flaggy light loam 7 inches thick. Hard sandstone is at a depth of 16 inches. Depth to sandstone ranges from 10 to 20 inches. Permeability of this Rentsac soil is moderately rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is rapid, and the hazard of water erosion is moderate to very high.

78-Rock outcrop (50-100 percent slope) can be found on mountains, in canyons, and on ridges, hills, and upland breaks. It consists of barren exposures of sandstone, hard shale, siltstone, or limestone. Elevation is 5,100 to 9,600 feet. The average annual precipitation is 8 to 20 inches, the average annual air temperature is 38 to 50 degrees F, and the average frost-free period is 45 to 130 days. This unit is 90 percent or more exposed bedrock with some soil material in the crevices and at the base of the slopes. Accumulations of boulder and stones are also common at the base of the slopes. Rock outcrop most commonly occurs as nearly vertical ledges and cliffs that are 3 to 50 feet high and 5 to 1,500 feet long.

Environmental Consequences of the Proposed Action: Approximately 81% of all surface disturbing activities will occur on soil unit 73 which has rapid runoff potential, and moderate to very high erosive potential. Improper drainage from the project areas will increase potential for overland flows accelerating erosion rates leading to soil piping, head cutting and gully formation. Removal of limited ground cover will also expose soils to erosional processes. Heavy traffic will

increase soil compaction decreasing infiltration rates which in turn will also increase potential for erosive overland flows.

Leaks or spills of environmentally unfriendly substances on or near the pad may contaminate soils hindering revegetation efforts. Soils unable to support a healthy plant community will be less cohesive (due to lack of root structure) and more vulnerable to erosional processes.

Environmental Consequences of the No Action Alternative: None

Mitigation: Comply with "Gold Book" surface operating standards for constructing well pads and access roads (copies of the "Gold Book" can be obtained at the WRFO). Complete reclamation will follow abandonment of well pad. Access roads and well pads will be recontoured and 100% of disturbed surfaces will be revegetated with the BLM native seed mixture #3.

Finding on the Public Land Health Standard for upland soils: Currently soils are meeting land health standards. Infiltration and permeability rates will be reduced with increased soil compaction associated with oil and gas development in the area. However, by following proper mitigation techniques and reclamation procedures, soil health will remain unchanged from current conditions and continue to meet land health standards.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The project area is primarily a pinyon/juniper type. The 23-10 well is contains primarily old growth pinyon/juniper with approximately an even mix of species. The 23-14 and 27-1 are also within an old growth pinyon /juniper association with the dominant species being Utah juniper. The 23-14 well is within a hillside bunchgrass community which was recently burned by wildfire. This fire was not seeded and composition is of native species including salina wildrye, ephedra, shadscale, winterfat, Indian ricegrass, needle-and-thread grass and a variety of native forbs. The 23-5 access road is within the pinyon/juniper association that is dominated by old growth pinyon/juniper. Non-native cheatgrass is found throughout the area.

Environmental Consequences of the Proposed Action: Following reclamation these vegetation sites have relatively good success at establishment of perennial vegetation cover. The juniper woodland would establish cover suitable for soil retention within 3-5 years and initial establishment of junipers in 15-20 years. Development of a late seral community would take 150-200 years. The hillside bunchgrass site would develop into a mature community in 20-30 years.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* The above described plant community meets the standards for plant health. This status will not change with the proposed action.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: The proposed locations are separated from warm-water aquatic communities supported by the lower White River in Utah by at least five miles of ephemeral channel.

Environmental Consequences of the Proposed Action: Separated by at least 5 miles of ephemeral channel, there is no reasonable likelihood that aquatic habitats associated with downstream perennial systems would be influenced by proposed well and road construction.

Environmental Consequences of the No Action Alternative: There would be no immediate action authorized that would have potential to affect wetland or riparian communities.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): Because there are no aquatic habitats or animals potentially influenced by the proposed or no-action alternatives, a land health standard finding is not applicable. The proposed and no action alternatives would have no measurable influence on aquatic habitats associated with downstream systems.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The proposed locations are generally situated in open-canopied pinyon-juniper woodlands with minor inclusions of black and Wyoming big sagebrush. These woodlands are mature, but stunted, and support a sparse (<10%) subcanopy of mountain mahogany and ephedra with poor herbaceous development (i.e., platey shale substrate).

Pad and access proposals that involve suitable raptor nesting habitat were inspected by BLM biologists for evidence of raptor nesting activity on 7 March 2006. These stunted stands are generally composed of mature or overmature junipers liberally interspersed with a submature or early mature pinyon pine component. The stands contain few larger-diameter trees that provide spreading crowns preferred as raptor nest substrate. There was no evidence of past or recent raptor nest activity found during on-site surveys-a result consistent with an extremely limited historical incidence of nests being found in these stunted woodlands.

The proposed wells are encompassed by general winter ranges of deer and elk. These ranges sustain big game use from November through early May. Although browse use in the project area indicates relatively short duration winter deer use, a relatively large burn in the headwaters of Weaver Canyon attracts substantial winter elk use. Current road densities are moderate (1.5-

2.5 miles per square mile) in the project vicinity and generally meet the road density objectives established in the White River ROD/RMP (i.e., road densities of 3 miles/square mile on big game ranges, White River ROD/RMP, page 2-29). The 23-10 and 23-9 locations lie immediately adjacent to publicly accessible roads and the 23-14 location is located in close proximity to a producing well. The 23-14 and 27-1 locations are accessed by dedicated well access roads that have gating requirements attached to previous development. These gates are intended to limit road use to low-frequency well development or maintenance activity throughout the year.

Non-game wildlife using this area are typical and widely distributed in extensive like habitats across the Resource Area and northwest Colorado; there are no narrowly endemic or highly specialized species known to inhabit those lands potentially influenced by this action.

Environmental Consequences of the Proposed Action: The applicant anticipates that the wells would be drilled sequentially from spring through early fall. It is likely that this development would be accomplished prior to big game occupation of these winter ranges. Big game habitat disuse and elevated energy demands attending road proliferation and increasing off-road vehicle use received prominent attention in the White River ROD/RMP. There is little new access required for 3 of these pads, but the 27-1 pad requires a substantive extension onto a previously unroaded bench. As a means of reducing long-term impacts to the utility of local deer and elk winter ranges and meeting road density objectives established in the White River ROD/RMP (i.e., road densities of 3 miles/square mile on big game ranges, White River ROD/RMP, page 2-29), the 27-1 location would be subjected to the gating requirement installed for the previously approved KGH 26-4 and 26-5 locations.

Well maintenance and monitoring activities during the winter and early spring months would result in minor and temporary displacement of animals and disuse of local forage and cover resources by big game, particularly elk. Access to the 23-14 and 27-1 locations originate from previously developed well access routes that have been gated, substantially reducing the frequency and duration of disruptive activity associated with recreation use in the vicinity of these wells. Long term occupation of these lands and the reduction in the herbaceous and woody forage base for big game (about 9 acres) would be discountable at the landscape level. Similarly, the loss of forage and cover for non-game animals would be negligible.

Environmental Consequences of the No Action Alternative: No immediate action would be authorized that would involve the adverse modification of terrestrial wildlife habitats.

Mitigation: Roads accessing the 23-14 and 27-1 locations will be subject to gated access restrictions that were previously applied to the Bayless 23-15 location (CO-110-2005-132-EA) and KGH 26-4 and 26-5 locations (CO-110-2005-104-EA). It will remain the mutual responsibility of the operators that these gates would be installed or otherwise conditioned and operated such that they will effectively deter unauthorized vehicular bypass over the life of the project. It is intended that these well accesses would remain effectively restricted throughout the year and available only to authorized use associated with natural gas development and BLM administration.

The use of interim reclamation techniques will be used to the extent practicable on all pads such that: 1) all available topsoil material would be used on recontoured cut and fill slopes and areas outside the anchors (maintaining the viability of the soils for final reclamation), 2) production facilities will be located to maximize the extent of surface disturbance available for effective reclamation during the production phase of the well (e.g., where access road enters pad), and 3) all disturbed areas outside the deadman anchors will be recontoured to the extent practicable and those areas seeded with the recommended seed mix once well completion activities have been finalized or at the direction of the Authorized Officer. The applicant shall remain responsible for preparing the seedbed as necessary to reseed areas where reclamation has failed on previously permitted surface disturbance associated with the Bayless 23-15 well, including associated pipelines and the cut and fill slopes of access roads.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The project area presently meets the public land health standards for terrestrial animal communities. As conditioned, the proposed action would have negligible long term influence on the utility or function of big game, raptor, or non-game habitats surrounding these wells. In an overall context, lands affected by the no-action or proposed action would continue to meet the land health standard for terrestrial animals.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management			X
Forest Management			X
Geology and Minerals			X
Hydrology/Water Rights	X		
Law Enforcement		X	
Noise		X	
Paleontology			X
Rangeland Management		X	
Realty Authorizations			X
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: For well numbers 23-9, 23-10, 23-14 and 27-1, the proposed access will be BLM road 1220 a native surfaced road. All roads are used primarily for oil and gas production as very little if any legal public access is available to this area.

Environmental Consequences of the Proposed Action: It is likely that roads surface conditions to BLM 1220 and other unnumbered routes used by this proposed action will degrade due to use if proper maintenance is not completed.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

FIRE MANAGEMENT

Affected Environment: All the wells proposed with the exception of the 23-9 fall within the pinion-juniper vegetation association totaling approximately 7.34 acres of disturbance in the PJ. Due to the existing tree cover of pinion and juniper, there will be a need for the operator to clear some of these trees. If not adequately treated, these trees will result in elevated hazardous fuels conditions and remain on-site for many years. These accumulations of dead material are very receptive to fire brands and spotting from wind driven fires and can greatly accelerate the rate of spread of the fire front. The road(s) associated with this project may be used by the general public for a variety of uses, including access for fire wood gathering, hunting and other dispersed recreational activities. Increased public use of an area will nearly always result in an increased potential for man-caused wildland fires.

The National Fire Plan calls for "firefighter and public safety" to be the highest priority for all fire management activities. In the pinion, juniper, and brush types common on the White River Resource Area, roads and other man-made openings are commonly used as fuel breaks or barriers to control the spread of both wildland and prescribed fires. By reducing the activity fuels created from this proposal, future fire management efforts in this area should be safer for those involved and more effective.

Environmental Consequences of the Proposed Action: There will be approximately 7.34 acres of road and well pad construction requiring the removal of pinion/juniper fuel type with the Weaver Ridge 23-14, Weaver Ridge 23-10, and Weaver Ridge 27-1 well sites and the 1,356 feet of ROW construction to reach the Utah well. If not treated the slash and woody debris will create an elevated hazardous dead fuel loading which could pose significant control problems in the event of a wildfire. Additionally there would be greater threat to public, Bayless personnel/contractors, and fire suppression personnel.

Environmental Consequences of the No Action Alternative: There would be no tree removal or disturbance which would cause significant dead fuel loading.

Mitigation: Several options may be considered for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines

are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This would effectively break down the woody fuel and scatter the debris thereby eliminating any hazardous fuel load adjacent to the new road and well pad.

The other option would be to cut trees and have them removed for firewood, posts, or other products (See Forest Management). The branches and tops should be lopped and broadly scattered to a depth of 24 inches or less. If the products are left for collection by the general public, they should be piled along the road side or pad to facilitate removal.

FOREST MANAGEMENT

Affected Environment: The project area is primarily a pinyon/juniper type. The 23-10 well is contains primarily old growth pinyon/juniper with approximately an even mix of species. The 23-14 and 27-1 are also within an old growth pinyon /juniper association with the dominant species being Utah juniper. The 23-5 access road is within the pinyon/juniper association that is dominated by old growth pinyon/juniper.

Environmental Consequences of the Proposed Action: The permit holder will be required to purchase the trees prior to The juniper woodland would establish cover suitable for soil retention within 3-5 years and initial establishment of junipers in 15-20 years. Development of a late seral community would take 150-200 years.

Environmental Consequences of the No Action Alternative: There would be no impacts to woodland communities.

Mitigation: White River ROD/RMP of 1997, Appendix B; COA #7: All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:

a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance.

b. Purchased trees may be removed from federal land for resale or private use. Limbs may be scattered off the area of disturbance but not dozed off.

c. Chipped and scattered.

GEOLOGY AND MINERALS

Affected Environment: The surface geologic formation of the proposed wells is Green River. The targeted zone for these wells is in the Mancos. These wells are located on federal oil and gas leases COC-58705. During drilling potential water, coal, oil and gas zones will be encountered from surface to the targeted zone.

Environmental Consequences of the Proposed Action: The proposed cementing procedure for the wells isolates the formations and will prevent the migration of gas, water, and oil between formations. Coal zones located in the Mesaverde will also be isolated during this procedure. Development of these wells will deplete the natural gas hydrocarbon resources in the targeted formation

Environmental Consequences of the No Action Alternative: The oil and gas resources of the targeted zones would not be fully developed.

Mitigation: None

PALEONTOLOGY

Affected Environment: Weaver Ridge wells23-14: the proposed well pad location is in an area generally mapped as the Parachute Creek Member of the Green River Formation (Tweto 1979). The BLM, WRFO has classified the Parachute Creek Member of the Green River Formation as a Condition I formation which means it is known to produce scientifically important fossil resources.

Weaver Ridge well 23-9: the proposed well pad location is in an area generally mapped as the Parachute Creek Member of the Green River Formation (Tweto 1979). The BLM, WRFO has classified the Parachute Creek Member of the Green River Formation as a Condition I formation which means it is known to produce scientifically important fossil resources.

Weaver Ridge well 23-10: the proposed well pad location and access road is in an area generally mapped as the Parachute Creek Member of the Green River Formation (Tweto 1979). The BLM, WRFO has classified the Parachute Creek Member of the Green River Formation as a Condition I formation which means it is known to produce scientifically important fossil resources.

Weaver Ridge well 27-1: the proposed well pad location and access road is in an area generally mapped as the Parachute Creek Member of the Green River Formation (Tweto 1979). The BLM, WRFO has classified the Parachute Creek Member of the Green River Formation as a Condition I formation which means it is known to produce scientifically important fossil resources.

ROW Application: Bayless proposes to build a new road for the Colorado portion of an access road to the proposed Weaver Ridge well 25-3. The proposed access road is located in an area

generally mapped as the Douglas Creek member of the Green River Formation (Tweto 1979). The BLM, WRFO has classified the Douglas Creek Member as a Condition II formation meaning it is known to produce fossils but the full nature of the fossil resource in this formation is not well understood.

Environmental Consequences of the Proposed Action: Weaver Ridge well 23-14: if it becomes necessary to excavate into the underlying rock formation to level the pad or construct the reserve/blooie pit there is the potential to encounter and damage scientifically important fossil resources.

Weaver Ridge well 23-9 if it becomes necessary to excavate into the underlying rock formation to level the pad or construct the reserve/blooie pit there is the potential to encounter and damage scientifically important fossil resources.

Weaver Ridge well 23-10 if it becomes necessary to excavate into the underlying rock formation to grade and level the road or level the pad or construct the reserve/blooie pit there is the potential to encounter and damage scientifically important fossil resources.

Weaver Ridge well 27-1 if it becomes necessary to excavate into the underlying rock formation to grade and level the road or level the pad or construct the reserve/blooie pit there is the potential to encounter and damage scientifically important fossil resources.

ROW Application: Bayless proposes to build a new road for the Colorado portion of an access road to the proposed Weaver Ridge 25-3 well. If it should become necessary to excavate into the underlying rock formation to grade and level the road there is a potential to damage scientifically important fossil resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: Weaver Ridge well 23-14, Weaver Ridge well 23-9, Weaver Ridge well 23-10 and access road, Weaver Ridge well 27-1 and access road and for the ROW Application: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator

will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. If it becomes necessary, at any time, to excavate into the underlying rock formation to grade and level the road, level the well pad or excavate the reserve/blooie pit a paleontological monitor shall be present prior to the initiation of any such excavations and shall be present during all such excavations unless professional judgment indicates monitoring is not necessary. The monitor shall inform the Authorized Officer of any such recommendations to cease monitoring.

RANGELAND MANAGEMENT

Affected Environment: The project area is within the Weaver Draw allotment on which sheep are grazed during the winter and early spring. This allotment is administered out of the Vernal office of the BLM.

Environmental Consequences of the Proposed Action: There would be removal of forage associated with construction of well pads and roads. This forage loss is considered minimal in that the majority of the area impacted is pinyon/juniper woodland on which forage is limited. These woodlands do contain ephedra a woody shrub which is usable to sheep. Following reclamation the woodland sites are expected to provide increased forage for livestock. There are not any rangeland management projects which would be impacted by the project. Interference is expected to be minimal during construction as the majority of work will be conducted when livestock are not present. There is the opportunity for conflicts with the livestock operation during production of the field primarily in vehicle collisions or disruption during flaring or work over operations.

Environmental Consequences of the No Action Alternative: There would be no impacts to the livestock operation.

Mitigation: No Additional.

REALTY AUTHORIZATIONS

Affected Environment: Access to Weaver Ridge wells 23-14 and 23-9 will be from existing rights-of-way and on-lease (COC 058705). Access to the 27-1 and 23-9 wells will require an off-lease portion to reach the on-lease portion. The Weaver Ridge 25-3 well is located in Utah, but the reasonable access is from Colorado and will be an off-lease ROW. The route for this road was on-sited with the other wells.

Environmental Consequences of the Proposed Action: The off lease portions of access to the 27-1 and 23-10 wells and the Colorado portion of the access to the 25-3 well in Utah will be authorized as an amendment to Bayless' existing road right-of-way COC68238. The total disturbance will be 12.047 acres, more or less. The right-of-way amendment will add sections:

WELL NAME	WIDTH - FEET	LENGTH - FEET	ACRES
Weaver Ridge 27-1	35	11668	9.375
Weaver Ridge 23-10	35	2000	1.607
Weaver Ridge 25-3	35	1325	1.065
		Total	12.047

Environmental Consequences of the No Action Alternative: none

Mitigation: Construction of the access road to the Weaver Ridge 25-3 well in Utah shall require a Notice to Proceed to be issued when the APD is approved by the Vernal Field Office.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The project areas most resemble a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM physical and social recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

Environmental Consequences of the Proposed Action: The public will lose approximately 10 acres of dispersed recreation potential while wells are in operation. The public will most likely not recreate in the vicinity of these facilities and will be dispersed elsewhere. If action coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists.

With the introduction of new well pads and roads, an increase of traffic could be expected increasing the likihood of human interactions, the sights and sounds associated with the human environment and a less naturally appearing environment.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential and no impact to hunting recreationists.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: The proposed actions would be located in an area with a VRM II classification. The objective of this class is to retain the existing character of the landscape. The

level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed actions would be located in areas with dense to scattered pinyon/juniper with no routes traveled frequently by a casual observer. Existing roads in the area are dirt and most do not offer through traffic unless permission was obtained to pass through private property. A casual observer might catch glimpses of the proposed actions, but the proposed actions would not attract the attention of the casual observer. By painting all facilities Juniper Green as stated in the APD, the level of change to the characteristic landscape would be low, and the objectives of the VRM II classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: None

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from oil and gas development were analyzed in the White River Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) completed in June 1996. Current development, including the proposed action, has not exceeded the cumulative impacts from the foreseeable development analyzed in the PRMP/FEIS.

REFERENCES CITED:

Conner, Carl E. and Barbara J. Davenport
2006 Class III Cultural Resource Inventory Report for Four Proposed Federal Well Locations (Weaver Ridge Unit #23-9, #23-10, #23-14, and #2701) and Access Roads in Rio Blanco County, Colorado, For Robert L. Bayless, Producer LLC. Grand River Institute, Grand Junction.

Tweto,Odgen
1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Nate Dieterich	Hydrologist	Air Quality
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Michael Selle	Archeologist	Cultural Resources Paleontological Resources
Robert Fowler	Rangeland Management Specialist	Invasive, Non-Native Species
Ed Hollowed	Wildlife Biologist	Migratory Birds
Ed Hollowed	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Melissa Kindall	Hazmat Collateral	Wastes, Hazardous or Solid
Nate Dieterich	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Ed Hollowed	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Nate Dieterich	Hydrologist	Soils
Robert Fowler	Rangeland Management Specialist	Vegetation
Ed Hollowed	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Robert Fowler	Rangeland Management Specialist	Rangeland Management
Linda Jones	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Keith Whitaker	Natural Resource Specialist	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2006-046-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve development of the wells and associated access roads as described in the proposed action, with the addition of the mitigation measures listed below. This development, with mitigation, is consistent with the decisions in the White River ROD/RMP, and environmental impacts will be minimal.

MITIGATION MEASURES: 1. The operator will be responsible for complying with all local, state, and federal air quality regulations as well as providing documentation to the BLM that they have done so. To minimize production of fugitive particulate matter, vehicle speeds must not exceed 15 mph *or* dust plume must not be visible at appropriate designated speeds for road design. In addition, the application of a BLM approved dust suppressant (e.g. water or chemical stabilization methods) will be required during dry periods when dust plumes are visible at speeds less than or equal to 15 mph. Surfacing the roadway with gravels will also help mitigate production of fugitive particulate matter.

2. To reduce production of fugitive particulate matter originating from well pads and associated stockpiled soils (long term storage) interim reclamation will be required. Interim reclamation will consist of excess stockpiled soils associated with pad construction being pulled back over the portion of the well pad not being utilized for production facilities and access. Portions of the well pad undergoing interim reclamation will be returned to grade (as close as possible), promptly re-seeded, and biodegradable fabrics will be utilize on slopes exceeding 5% (e.g. fill slopes).

3. If interim reclamation is not practical (e.g. completion of drilling operation will require an extended period time [multiple well pads]), stockpiled topsoil will be covered with biodegradable fabrics such as (but not limited to) jute netting and seeded with BLM seed mixture recommended in the Vegetation section. Furthermore, soils stockpiled for short durations (e.g. during road/pipeline construction/maintenance) will be wetted during dry periods to reduce production of fugitive particulate matter.

4. Weaver Ridge wells 23-14, 23-9 and 23-10, access roads and Weaver Ridge 27-1 well:

The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

5. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

6. For the southeastern access route for the ROW into Utah the following additional mitigation would apply:

A monitor shall be present during initial surface grading to identify any previously undiscovered subsurface features on the site.

7. In accordance with Condition of Approval (COA) #179 from Appendix B of the White River ROD/RMP, application of herbicides must be under field supervision of an Environmental Protection Agency (EPA) certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

8. The operator shall prevent use by migratory birds of reserve pits that store or are expected to store fluids which may pose a risk to such birds (e.g., migratory waterfowl, shorebirds, wading birds and raptors) during completion and after completion activities have ceased. Methods may include netting, the use of bird-balls, or other alternative methods that effectively prevent use and that meet BLM approval. It will be the responsibility of the operator to notify the BLM of the method that will be used to prevent use two weeks prior to when completion activities are expected to begin. The BLM approved method will be applied within 24 hours after completion

activities have begun. All lethal and non-lethal events that involve migratory birds will be reported to the Petroleum Engineer Technician immediately.

9. The applicant shall be required to collect and properly dispose of any solid waste generated by the proposed actions.

10. The operator will be responsible for complying with all local, state, and federal water quality regulations (such as but not limited to Phase I Storm Water Permit, 404 permits (if applicable), and Industrial Wastewater/Produced Water Permits). The operator will also be required to provide the BLM with documentation that all required permits were obtained.

11. Surface Water: All surface disturbing activities will strictly adhere to "Gold Book" surface operating standards for oil and gas exploration and development (copies of the "Gold Book" can be obtained at the WRFO). Corrugated metal pipes (CMPs) are not recommended on slopes less than 10% and will NOT be used as drainage relief structures for stream crossings/gullies or to drain inside drain ditches on slopes less than 3%. Based on the nature of the affected soils, drain dips will be utilized in place of CMPs in these locations. Energy dissipaters such as large gravels/small cobbles will be used at culvert and drainage dip outlets to minimize additional erosion. To mitigate water being channelized down roadways, all activity must stop when soils or road surfaces become saturated to a depth of three inches. Mud blading will be prohibited in attempts to reduce further soil displacement. Furthermore, following abandonment of the well pad all disturbed surfaces will be recontoured to the original grade promptly covered with a sufficient amount of woody debris (if available) and seeded with the appropriate seed mixture as outlined in the vegetation section of this document.

12. To mitigate surface erosion at well pads, interim reclamation will be required as outlined in the Air Quality mitigation sections above. In addition, silt fences will be utilized on all slopes exceeding 5 % (e.g. cut and fill slopes). Furthermore, special care must be given to pad 23-9 to prevent erosion of stockpiled soils/fill material from entering the affected drainages. Silt fences, proper seeding, and the used of bio-degradable fabrics are recommended to mitigate potential 404 violations.

13. Ground Water: Shallow aquifers shall be protected from hydrofracturing and the production of oil and gas by installation and cementing of surface and intermediate casing. Any groundwater produced from the Fort Union or Mesaverde Formations will be hauled off and disposed of due to poor water quality and therefore preventing adverse impacts to valuable surface and ground water resources. Environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of spill-guards (or equivalent spill prevention equipment) under and around pumping equipment is suggested to intercept such contaminants prior to contacting soils. Furthermore, to protect potential shallow ground water all pits shall be lined and all wastes associated with construction and drilling will be properly treated and disposed of as outlined in the proposed actions.

14. Comply with "Gold Book" surface operating standards for constructing well pads and access roads (copies of the "Gold Book" can be obtained at the WRFO). Complete reclamation will

follow abandonment of well pad. Access roads and well pads will be recontoured and 100% of disturbed surfaces will be revegetated with the BLM native seed mixture #3.

Native Seed Mix #3

Western wheatgrass (Arriba)	2 LBS PLS/ACRE
Indian ricegrass (Nezpar)	1 LBS PLS/ACRE
Bluebunch wheatgrass (Whitmar)	2 LBS PLS/ACRE
Thickspike wheatgrass (Critana)	2 LBS PLS/ACRE
Green needlegrass (Lodorm)	1 LBS PLS/ACRE
Globemallow	.5 LBS PLS/ACRE

Use seed that is certified and free of noxious weeds. Seed certification tags must be submitted to the Area Manager within 30 days of planting seed.

15. Roads accessing the 23-14 and 27-1 locations will be subject to gated access restrictions that were previously applied to the Bayless 23-15 location (CO-110-2005-132-EA) and KGH 26-4 and 26-5 locations (CO-110-2005-104-EA). It will remain the mutual responsibility of the operators that these gates would be installed or otherwise conditioned and operated such that they will effectively deter unauthorized vehicular bypass over the life of the project. It is intended that these well accesses would remain effectively restricted throughout the year and available only to authorized use associated with natural gas development and BLM administration.

16. The use of interim reclamation techniques will be used to the extent practicable on all pads such that: 1) all available topsoil material would be used on recontoured cut and fill slopes and areas outside the anchors (maintaining the viability of the soils for final reclamation), 2) production facilities will be located to maximize the extent of surface disturbance available for effective reclamation during the production phase of the well (e.g., where access road enters pad), and 3) all disturbed areas outside the deadman anchors will be recontoured to the extent practicable and those areas seeded with the recommended seed mix once well completion activities have been finalized or at the direction of the Authorized Officer. The applicant shall remain responsible for preparing the seedbed as necessary to reseed areas where reclamation has failed on previously permitted surface disturbance associated with the Bayless 23-15 well, including associated pipelines and the cut and fill slopes of access roads.

17. Several options may be considered for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This would effectively break down the woody fuel and scatter the debris thereby eliminating any hazardous fuel load adjacent to the new road and well pad.

18. The other option would be to cut trees and have them removed for firewood, posts, or other products (See Forest Management). The branches and tops should be lopped and broadly

scattered to a depth of 24 inches or less. If the products are left for collection by the general public, they should be piled along the road side or pad to facilitate removal.

19. White River ROD/RMP of 1997, Appendix B; COA #7: All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:

a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance.

b. Purchased trees may be removed from federal land for resale or private use. Limbs may be scattered off the area of disturbance but not dozed off.

c. Chipped and scattered.

20. Weaver Ridge well 23-14, Weaver Ridge well 23-9, Weaver Ridge well 23-10 and access road, Weaver Ridge well 27-1 and access road and for the ROW Application: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

21. If it becomes necessary, at any time, to excavate into the underlying rock formation to grade and level the road, level the well pad or excavate the reserve/blooie pit a paleontological monitor shall be present prior to the initiation of any such excavations and shall be present during all such excavations unless professional judgment indicates monitoring is not necessary. The monitor shall inform the Authorized Officer of any such recommendations to cease monitoring.

22. Construction of the access road to the Weaver Ridge 25-3 well in Utah shall require a *Notice to Proceed* to be issued when the APD is approved by the Vernal Field Office.

COMPLIANCE/MONITORING:

NAME OF PREPARER: Tamara Meagley

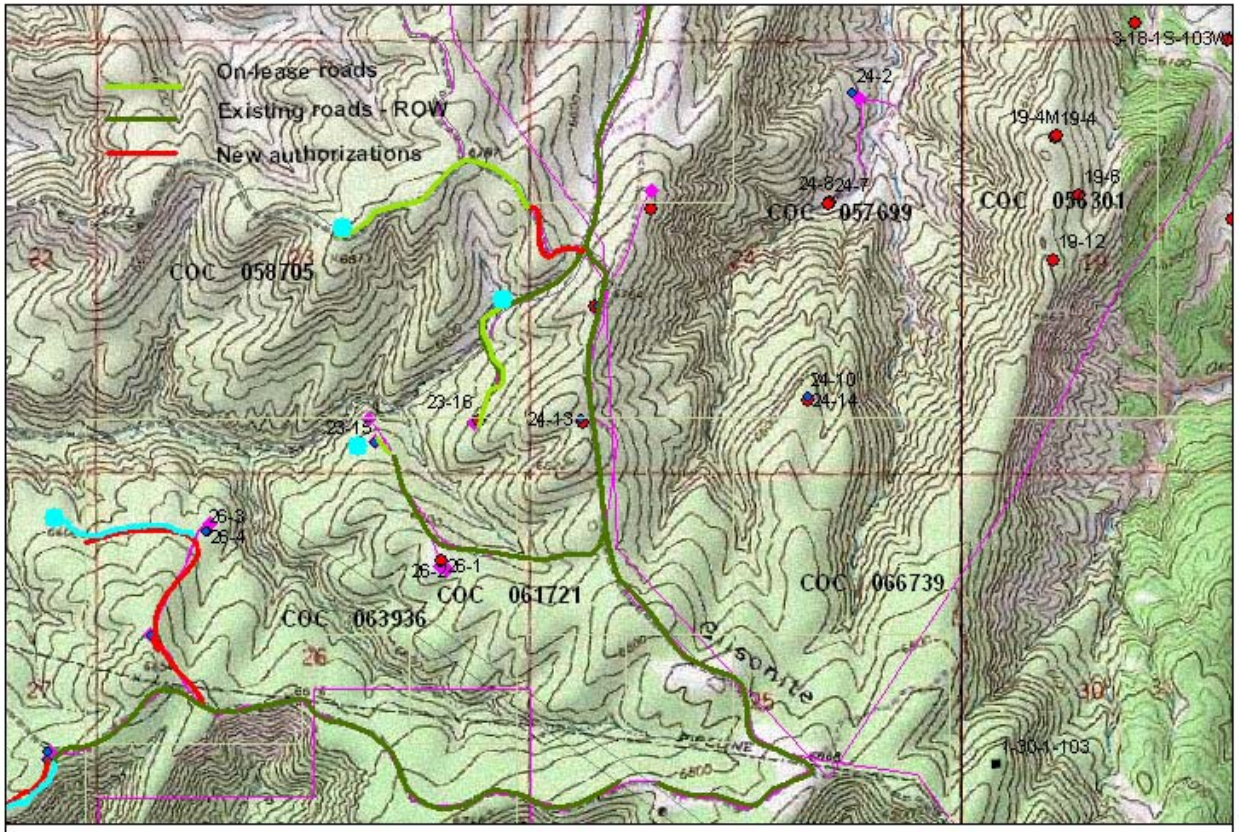
NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL: _____
Field Manager

DATE SIGNED: 3/15/06

ATTACHMENTS: Location of Access Roads and well pads (depicted in blue)
Location map of the proposed action

CO-110-2006-046-EA 31



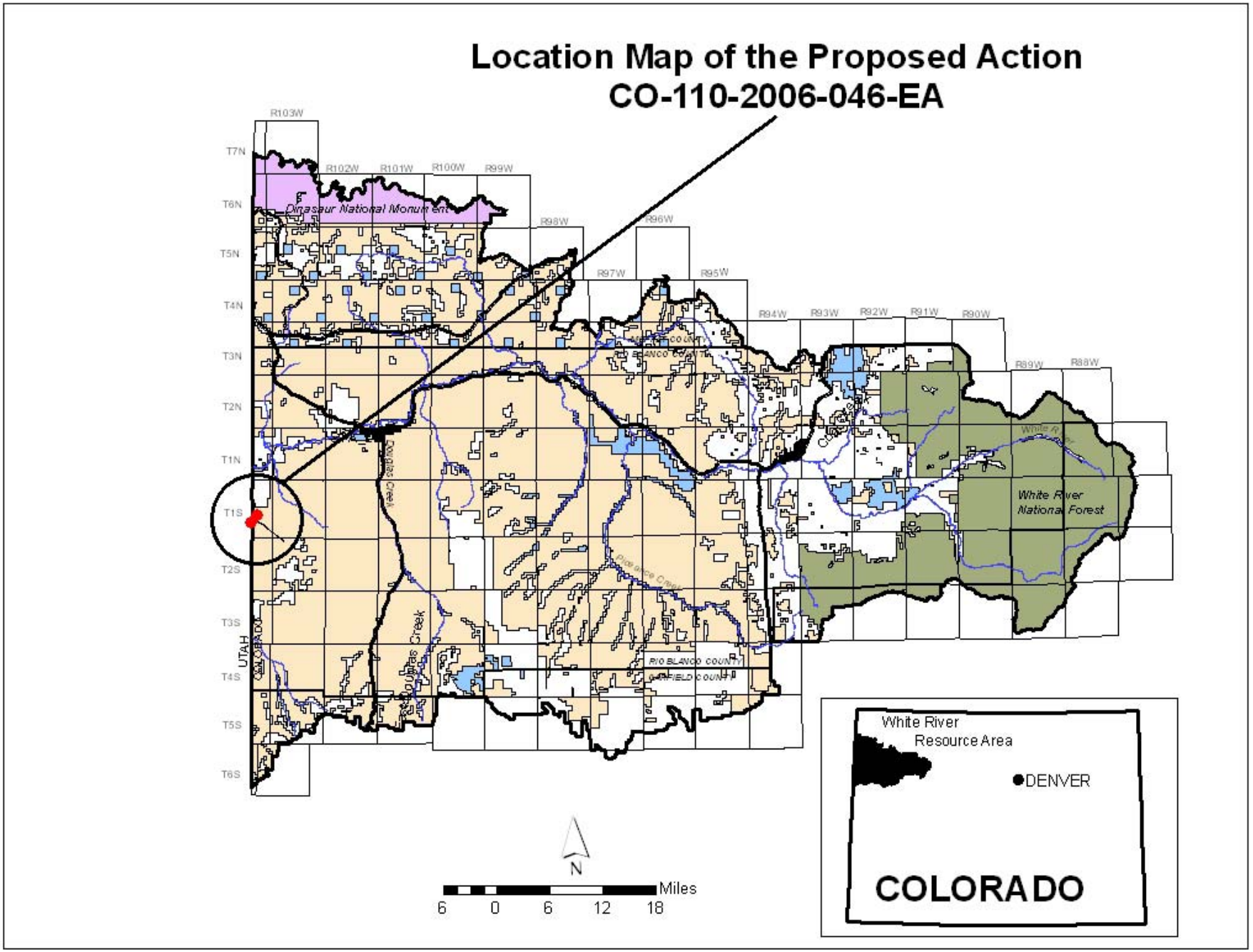
ROBERT L BAYLESS
ACCESS ROADS

AMEND COC68238
CO-110-06-046
T1S R104W sections 23, 24, 25, 26, 27

0.25 0.125 0 0.25 Miles

1:24000

N


Location Map of the Proposed Action
CO-110-2006-046-EA
R103W
R102W
R101W
R100W
R99W
R98W
R97W
R96W
R95W
R94W
R93W
R92W
R91W
R90W
R89W
R88W
T7N
T6N
T5N
T4N
T3N
T2N
T1N
T1S
T2S
T3S
T4S
T5S
T6S
Dinosaur National Monument
Douglas Creek
Douglas Creek
Piceance Creek
White River
National Forest
UTAH
COLORADO
RIO BLANCO COUNTY
GARFIELD COUNTY
N
Miles
6 0 6 12 18
White River
Resource Area
DENVER
COLORADO